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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,603	12/08/2003	Kamel M. Shaheen	I-2-0490.1US	4022

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VOLPE AND KOENIG, P.C.  
DEPT. ICC  
UNITED PLAZA, SUITE 1600  
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PHILADELPHIA, PA 19103

EXAMINER

HOM, SHICK C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/730,603	SHAHEEN, KAMEL M.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shick C Hom	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Oath/Declaration***

1. Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using

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phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Objections***

3. Claims 1-15 are objected to because of the following informalities: In claims 1-7 and 14-15 lines 3 and 4, the words "a WLAN or a WWAN" seem to refer back to "the WLAN or the WWAN" recited in claims 1-7 and 14-15 lines 2 and 3, respectively. If this is true, it is suggested changing "a WLAN or a WWAN" to ---the WLAN or the WWAN---, respectively. In claims 7, 15 line 7, the words "a first one of said stations" seem to refer back to the "first station" recited in claims 7, 15 lines 1-2. If this is true, it is suggested changing "a first one of said stations" to ---the first station---. In claim 7 lines 12 and 15, the words "a handoff" seem to refer back to the "handoff" recited in claim 7 line 1. If this is true, it is suggested changing "a handoff" to ---the handoff---. In claim 10 line 2, the words "an ESS ID" seem to refer back to the "ESS ID" recited in claim 9 line 2. If this is true, it is suggested changing "an ESS ID" to ---the ESS ID---. In claim 14 line 20, the words "a handoff" seem to refer back to the "handoff" recited in claim 14 line 1. If this is true, it is suggested changing "a handoff" to ---the

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handoff---. In claim 15 line 8 delete "a second station" and insert ---said second station---. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 3, 5 lines 18 and 19; claim 2 lines 21 and 22; claims 4, 6 lines 17 and 18; claims 7, 15 lines 20 and 21 which recite "the handoff procedure" and "the session" lacks clear antecedent basis because no handoff procedure nor session have been previously recited in the claims and therefore the limitation is not clearly understood. In claims 2, 5 line 15-16; claim 14 line 18 which recite "the request therefor" lacks clear antecedent basis. In claims 5-6 lines 12-13 which recite "said connection" lack clear antecedent basis. In claim 14 lines 23-24 which recite "the handoff procedure" lacks clear antecedent basis. In claim 14 lines 16 and 17-18 which recite "said lost connection" lacks clear antecedent basis.

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***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Jawanda (6,243,581).

Regarding claims 1, 4 and 7:

Jawanda discloses the method for handoff of a wireless terminal between first and second stations in one of a wireless local area network (WLAN) and a wireless wide area network (WWAN), wherein the stations may both be part of a WLAN or a WWAN or one station is part of one of a WLAN or a WWAN and the other station is part of a remaining one of the WLAN and WWAN (Fig. 1 shows the base station 30, wireless network adapter 20, and mobile terminal 14, Fig. 4 and col. 5 line 20 to col. 6 line 10 recite a method of handoff in a wireless network including the WLAN and WWAN) comprising: said terminal (in Fig. 1 see terminal 14): responsive to loss of a connection with said first

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station, scanning for said second station; retrieving information from said second station; determining that the second station is different from said first station (see col. 5 lines 43-61 which recite the step of determining whether or not to handoff to the WWAN station in response to mobile terminal being moved out of range of WLAN wherein the determination is based on the number of transmission errors detected by WLAN interface and the received signal strength (RSS) of signals received by wireless LAN adapter); transmitting an association message to said second station, and, upon receipt of an association success message from said second station, initiates a handoff, providing to said second station information regarding said first station; said second station contacting said first station responsive to the information received from said terminal; said first station rerouting traffic to said second station and releasing said first station; and said second station responsive to the handoff procedure initiated by said first station reestablishing the session between said terminal and said second station (see col. 5 lines 20-42 which recite concurrent wireless data connections with both WWAN and WLAN while transfer of datagrams is handed off from the wireless connection with WWAN to the wireless connection with WLAN and maintaining the session between applications and col. 5 line 62

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to col. 6 line 10 which recite the step of reestablishing the connection with the WWAN and rerouting the traffic from the WLAN interface).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2, 3, 5, 6, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jawanda (6,243,581) in view of Verma et al. (2003/0224792).

Regarding claims 2, 3, 5, 6, 14, and 15:

Jawanda discloses the method for handoff of a wireless terminal between first and second stations in one of a wireless local area network (WLAN) and a wireless wide area network (WWAN), wherein the stations may both be part of a WLAN or a WWAN or one station is part of one of a WLAN or a WWAN and the other station is part of a remaining one of the WLAN and WWAN



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(Fig. 1 shows the base station 30, wireless network adapter 20, and mobile terminal 14, Fig. 4 and col. 5 line 20 to col. 6 line 10 recite a method of handoff in a wireless network including the WLAN and WWAN), comprising: said terminal (in Fig. 1 see terminal 14): responsive to loss of a connection with said first station, scanning for said second station; retrieving information regarding said second station; determining that the second station is different from said first station; transmitting an association message to said second station including information about the first station (see col. 5 lines 43-61 which recite the step of determining whether or not to handoff to the WWAN station in response to mobile terminal being moved out of range of WLAN wherein the determination is based on the number of transmission errors detected by WLAN interface and the received signal strength (RSS) of signals received by wireless LAN adapter); said second station contacting said first station to initiate a handoff from the first station to the second station; said first station rerouting traffic to said second station and releasing said first station; and said second station, responsive to the handoff procedure initiated by said first station reestablishing the session between said terminal and said second station (see col. 5 lines 20-42 which recite concurrent wireless data connections with both WWAN and WLAN

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while transfer of datagrams is handed off from the wireless connection with WWAN to the wireless connection with WLAN and maintaining the session between applications and col. 5 line 62 to col. 6 line 10 which recite the step of reestablishing the connection with the WWAN and rerouting the traffic from the WLAN interface).

For claims 2, 3, 5, 6, 14, and 15, Jawanda discloses all the subject matter of the claimed invention with the exception of wherein said second station contacting said first station responsive to the information received from said terminal to obtain an IP address of said lost connection; said terminal providing the IP address of said lost connection responsive to the request therefor as recited in claims 2, 3, 5, 6, 14, and 15.

verma et al. from the same or similar fields of endeavor teach that it is known to provide station responsive to the information received from said terminal to obtain an IP address of said lost connection; said terminal providing the IP address of said lost connection responsive to the request therefor (see IP address recited in paragraphs 0005, 0015; and paragraphs 0028, 0029, recite the method of handoff including the step of sensing loss of communication, requesting identifier value, retrieving call information and network address of the

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identifier value; and paragraph 0056 recite broadcasting handoff table to servers). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide station responsive to the information received from said terminal to obtain an IP address of said lost connection; said terminal providing the IP address of said lost connection responsive to the request therefor as taught by Verma et al. in the handoff method and apparatus of Jawanda. The station responsive to the information received from said terminal to obtain an IP address of said lost connection; said terminal providing the IP address of said lost connection responsive to the request therefor can be implemented by connecting the IP network including station responsive to the information received from said terminal to obtain an IP address of said lost connection; said terminal providing the IP address of said lost connection responsive to the request therefor of Verma et al. into the WWAN and WLAN of Jawanda. The motivation for providing IP address of said lost connection responsive to the request therefor as taught by Verma et al. in the method and apparatus for handoff of Jawanda being that it provides the added feature of connection to the Internet.

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9. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jawanda (6,243,581) in view of Chuah (6,567,416).

For claims 8-13, Jawanda discloses the apparatus described in paragraph 6 of this office action. For claims 8-13, Jawanda discloses all the subject matter of the claimed invention with the exception of wherein said first and second stations are each comprised of an extended service set (ESS) having an access point and an access router as in claim 8; wherein the ESS of said first station includes means for providing said terminal with an ESS identification (ESS ID) and a basic service set identifier (BSS ID) as in claim 9; wherein the means for retrieving information from said second station retrieves an ESS ID and BSS ID of said second station for use by said means for determining as in claim 10; wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is assigned an IP address as in claim 11; wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is connected through an IP address of said terminal as in claim 12; and wherein said scanning means includes means to lock on to a beacon from said second station as in claim 13.

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Chuah from the same or similar fields of endeavor teach that it is known to provide wherein said first and second stations are each comprised of an extended service set (ESS) having an access point and an access router (see col. 34 lines 5-19 which recite the ESS-ID including the access point AP and col. 9 lines 52-67 which recite the route); wherein the ESS of said first station includes means for providing said terminal with an ESS identification (ESS ID) and a basic service set identifier (BSS ID) (see the ESS ID and BSS ID recited in col. 14 line 66 to col. 15. line 16); wherein the means for retrieving information from said second station retrieves an ESS ID and BSS ID of said second station for use by said means for determining (see col. 34 lines 5-19 which recite the providing the ESS ID and BSS ID); wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is assigned an IP address (see 9 lines 52-67 which recite the IP router connecting the MSC to public internet or internet service providers); wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is connected through an IP address of said terminal (see 9 lines 52-67 which recite the IP router connecting the MSC to public internet or internet service providers); and wherein said scanning means includes means to

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lock on to a beacon from said second station (see the use of the beacon message recited in col. 14 line 66 to col. 15. line 16). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide said first and second stations are each comprised of an extended service set (ESS) having an access point and an access router; wherein the ESS of said first station includes means for providing said terminal with an ESS identification (ESS ID) and a basic service set identifier (BSS ID); wherein the means for retrieving information from said second station retrieves an ESS ID and BSS ID of said second station for use by said means for determining; wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is assigned an IP address; wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is connected through an IP address of said terminal; and wherein said scanning means includes means to lock on to a beacon from said second station as taught by Chuah in the apparatus of Jawanda. The first and second stations are each comprised of an extended service set (ESS) having an access point and an access router; wherein the ESS of said first station includes means for providing said terminal with an ESS identification (ESS ID) and a basic service

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set identifier (BSS ID); wherein the means for retrieving information from said second station retrieves an ESS ID and BSS ID of said second station for use by said means for determining; wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is assigned an IP address; wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is connected through an IP address of said terminal; and wherein said scanning means includes means to lock on to a beacon from said second station can be implemented by connecting the ESS including access point and access router and connecting the IP network including the assigned IP address and beacon of Chuah into the stations of Jawanda. The motivation for providing first and second stations each comprised of an extended service set (ESS) having an access point and an access router; wherein the ESS of said first station includes means for providing said terminal with an ESS identification (ESS ID) and a basic service set identifier (BSS ID); wherein the means for retrieving information from said second station retrieves an ESS ID and BSS ID of said second station for use by said means for determining; wherein said terminal further comprises means for connecting to an internet protocol (IP) network wherein said terminal is assigned an IP address; wherein said terminal

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further comprises means for connecting to an internet protocol (IP) network wherein said terminal is connected through an IP address of said terminal; and wherein said scanning means includes means to lock on to a beacon from said second station as taught by Chuah in the handoff apparatus of Jawanda being that it provides the added feature of connection to the Internet.

#### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Perras discloses a method, system and node for providing enhanced mobility in simple IP telecommunication networks when performing L2TP tunneling.

Raychaudhuri et al. disclose handoff method for an ATM wireless network wherein both the switch and the mobile buffer cells and the mobile controls when the handoff will occur.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANG TON  
PRIMARY EXAMINER